WHAT IS CLAIMED IS:

1. An integral storage-collector solar water-heating system comprising:
   - a tank having an inlet for city water inlet – located in the lower side of said tank, a first outlet for supplying water – located in the upper side of said tank - and a second outlet for feeding water to a fin – tube absorber – located in the lower side of said tank:
   - a thermally insulated layer, which is attached to the inside walls of said tank; and
   - an upper solar tank-absorber and a lower solar fin-tube absorber, each for the purpose of enabling a flow of water there-through to which solar heat collected by the absorbers can be transferred, wherein:
     - said upper solar tank-absorber is built inside the exposed wall of said tank, by a grid of tunnels that are grooved in said thermally insulated layer, having an inlet and an outlet into said tank; and

- said lower solar fin-tube absorber has an inlet and an outlet, wherein said inlet is connected to said second outlet of said tank and said outlet is connected to said inlet of said upper solar tank-absorber.

2. The system of claim 1, wherein the water flow means of said upper solar tank-absorber are created between said thermally insulated layer and the exposed walls of said tank, by a grid of tunnels that are grooved in said thermally insulated layer.

3. The system of claim 1, wherein said system is a low-profile solar system, which the bottom of said tank is located higher than the middle of said solar absorbers.

4. The system of claim 1, wherein said thermally insulated layer is built of two parts, an upper part and a lower part, wherein said two parts are parted by

flexible material for the purpose of shrinking while the water inside said solar-tank absorber is freezing.

5. The system of claim 1, wherein said system further includes at least one of flexible means, located between said thermally insulated layer and the opposite wall of said exposed wall of said tank, for the purpose of shrinking while the water inside said solar tank absorber is freezing.

6. The system of claim 1, further includes:
   - a water-supplying pipe, connected to said outlet of said tank enabling to supply water from said tank;
   - an electrical heating element, said element is attached around said supplying pipe for heating – when said element is activated – the water that is flowing there-through;
   - a thermo-siphon valve that is connected between the end of said supplying-pipe, and second outlet locate at the lower part of said tank or to the city water inlet in order to prevent the flow of the city

water – directly or via said tank - through said water outlet while supplying water, wherein said thermo-siphon enables the circle of water from the lower side to the upper side of said tank through said supplying-pipe while said water is being heated by said electrical element.

7. The system of claim 1, wherein said tank further includes a plurality of horizontal dividing-plates, dividing said tank into a plurality of cells, in order to increase stratification in tank, wherein each of said dividing-plate has a small opening enabling water to pass through and wherein said opening is located opposite to the openings of the neighbors' dividing-plates.

8. The system of claim 1, wherein said lower solar fin-tube absorber further includes a turbolator longitudinally inside the water flow means in order to increase heat transfer efficiency and wherein said turbolator is made of flexible material that is capable

to be shrunk while the water inside said water flow means is freezing.

9. The system of claim 1, further includes a water-supplying pipe, connected to the outlet of said tank enabling said tank to supply water and wherein the end of said water-supplying pipe and the inlet of said tank are on the same level, enabling to connect plurality of said system serially.

10. The system of claim 1, further includes at least one prop, pivotally joined to said system enabling to install said system in a variety of angles.

11. The system of claim 10, further includes a protractor and a compass, enabling to install said system in a variety of position according to given instructions.

12. An integral storage-collector solar water-heating system comprising:

- a tank having an inlet for city water inlet – located in the lower side of said tank – and an outlet for supplying water – located in the upper side of said tank, second outlet for feeding a fin – tube absorber – located in the lower side of said tank;
- a thermally insulated layer, which is attached to the inside walls of said tank, wherein said thermally insulated layer is built of two parts, an upper part and a lower part, wherein said two parts are parted by flexible material ;
- a solar tank-absorber and a solar fin-tube absorber, each for the purpose of enabling a flow of water there-through to which solar heat collected by the absorbers can be transferred, wherein:
  - said solar tank-absorber is created between said thermally insulated layer and the exposed walls of said tank, by a grid of tunnels that are grooved in said thermally insulated layer, having an inlet and an outlet into said tank; and
  - said solar fin-tube absorber has an inlet and an outlet, wherein said inlet is connected to said

second outlet of said tank or to the city water inlet pipe and said outlet is connected to said inlet of said upper solar tank-absorber;

- a plurality of horizontal dividing-plates, dividing said tank into a plurality of cells, wherein each of said dividing-plate has a small opening enabling water to pass through and wherein said opening is located opposite to the openings of the neighbors' dividing-plates;
- at least one of flexible means, located between said lower part of said thermally insulated layer and the bottom of said tank, for the purpose of shrinking while the water inside said solar tank absorber is freezing;
- a water-supplying pipe, connected to said outlet of said tank enabling to supply water from said tank;
- an electrical heating element, said element is attached around said supplying pipe for heating – when said element is activated – the water that is flowing there-through;

- a thermo-siphon valve that is connected between the end of said supplying-pipe, parallel to the water outlet of said supplying-pipe and to the lower part of said tank or to the city water, in order to prevent the flow of the city water – directly or via said tank - through said water outlet while supplying water, wherein said thermo-siphon enables the circle of water from the lower side to the upper side of said tank through said supplying-pipe while said water is being heated by said electrical element; and
- a turbolator located longitudinally inside the water flow means of said solar fin-tube absorber, wherein said turbolator is made of flexible material that capable to be shrunk while the water inside said water flow means is freezing.

13. The system of claim 12, further includes a circulating pump in order to circle water from said tank through said absorbers.

14. The system of claim 13, wherein said circulating pump has a sensor that activates said circulating pump according to predetermined temperature and/or radiation level.

15. The system of claim 14, wherein said fin-tube absorber is located higher than said tank and said fin-tube absorber is empty when said circulation pump is not activated.

16. A method of storage-collector solar water-heating comprising:

- creating a grid of tunnels in a tank, by grooving grid of tunnels in a thermally insulated layer and attaching the grooved side of said thermally insulated layer to an exposed wall inside of said tank, wherein said water-flow-grid has an inlet and an outlet;
- installing a thermo-siphon valve or a circulation pump between said inside space of said tank and outlet of said grid of tunnels; and

- connecting an external absorber between the bottom of said tank and the inlet of said grid of tunnels.